What is claimed is:

1.   In a channel estimator using a CIR (channel impulse response) estimating value, a channel estimator adopting masking, comprising a CIR masking unit removing a noise included in the CIR estimating value.

2.   The channel estimator of claim 1, the CIR masking unit comprising:

a mask signal generator generating a mask signal according to the CIR estimating value;

a CIR delayer matching a synchronization between the CIR estimating value and the mask signal; and

a masking processor removing the noise by performing the masking so that the CIR estimating value is outputted only for a section where the mask signal exits.

3.   The channel estimator of claim 2, wherein the mask signal generator generates the mask signal based on a CIR critical value and a mask window size wherein the CIR critical value is a minimum value accredited with a real CIR.

4.   The channel estimator of claim 3, wherein the CIR critical value is set to a value between '0.1' and '0.2' when a

maximum value of a CIR is normalized as '1' on a situation that there exists no ghost at all.

    5.   The channel estimator of claim 3, wherein the mask window size is about ±10 symbols centering around a CIR exceeding the CIR critical value.

    6.   The channel estimator of claim 2, wherein the masking processor is a multiplexer selecting to output either the CIR estimating value or '0' according to the mask signal.

    7.   The channel estimator of claim 2, wherein the masking processor is a multiplier multiplying the mask signal and the CIR estimating value together to output the CIR estimating value of a section where the mask signal is not '0'.

    8.   A channel estimator adopting masking, comprising:

a trained sequence generator outputting a trained sequence;

a cross correlator finding a cross correlating value between a signal transmitted from an outside and the trained sequence;

a max value searcher detecting a maximum value of the cross correlating value by predetermined field unit;

a cross correlating vector generator outputting a cross correlating vector amounting to a CIR (channel impulse response)

21

estimating range based on the maximum value of the cross correlating value;

a ROM previously storing to output an inverse matrix of an auto correlating value of the trained sequence;

5   an operator finding a CIR estimating value using the inverse matrix of the auto correlating value and the cross correlating vector; and

a CIR masking unit removing a noise included in the CIR estimating value.

10

9.   The channel estimator of claim 8, the CIR masking unit comprising:

a mask signal generator generating a mask signal according to the CIR estimating value;

15   a CIR delayer matching a synchronization between the CIR estimating value and the mask signal; and

a masking processor removing the noise by performing the masking so that the CIR estimating value is outputted only for a section where the mask signal exits.

20

10.   The channel estimator of claim 9, wherein the mask signal generator generates the mask signal based on a CIR critical value and a mask window size wherein the CIR critical value is a minimum value accredited with a real CIR.

11.   The channel estimator of claim 10, wherein the CIR

critical value is set to a value between '0.1' and '0.2' when a

maximum value of a CIR is normalized as '1' on a situation that

5   there exists no ghost at all.

12.   The channel estimator of claim 10, wherein the mask

window size is about ±10 symbols centering around a CIR exceeding

the CIR critical value.

10

13.   The channel estimator of claim 9, wherein the masking

processor is a multiplexer selecting to output either the CIR

estimating value or '0' according to the mask signal.

15   14.   The channel estimator of claim 9, wherein the masking

processor is a multiplier multiplying the mask signal and the CIR

estimating value together to output the CIR estimating value of a

section where the mask signal is not '0'.

20   15.   In an equalizer performing channel estimating through a

CIR (channel impulse response) estimating value, a channel

estimator adopting masking, comprising a CIR masking unit

removing a noise included in the CIR estimating value.